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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/664,364	09/18/2000	Jin-Tae Roh	3449-0131P	3941

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EXAMINER	
PSITOS, ARISTOTELIS M	

ART UNIT	PAPER NUMBER
2653	

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/664,364	ROH ET AL.	
	Examiner	Art Unit	
	Aristotelis M Psitos	2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 September 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7 and 10-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *13-16 and 20-22* is/are allowed.

6)☒ Claim(s) *1-7,10,17 and 18* is/are rejected.

7)☒ Claim(s) *12 and 19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 9/7/04 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Applicants' response of 9/7/04 has been considered with the following results.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

Claim 12 is objected to because of the following informalities: The examiner has concluded that step (d) in this claim refers to recording the test data into a "second field", in keeping with the arguments presented in the above communication. However, such is not positively recited in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1-3 and 17 & 18 are rejected under 35 U.S.C. 102(b/e) as anticipated by

a) Osakabe,

With respect to claim 1, Osakabe discloses a method for recording onto an optical disc wherein optimum power level is determined as noted in the flow charts depicted in figures 9 and 10. Applicants' attention is also drawn to col 1 line 51 to col. 2 line 26. The examiner interprets the limitation of claim 1 line 5 as being met by the additional ability relying upon the erase power as well as the modulation factor as further explained in col 4 starting at line 19.

Response to Arguments

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Applicants' arguments are not persuasive. Applicants' arguments on page 17-18 of the above noted response focuses upon:

a) "varying a characteristic value of the recording pulses other than recording power values". Such a limitation is not found in claims 1-3, or 17-18. Hence this argument is not of moment.

b) Applicants' are unable to find in Osakabe the recited (claimed) first and second field exist. Applicants' attention is drawn to the disclosure of Osakabe starting at col. 5 line 5 to col. 6 line 36, wherein the examiner interprets the disclosure as found in col. 6 lines 35-36 for providing a first and second field.

b) Spruit et al,

With respect to Spruit et al, applicants' attention is drawn to col. 1 line 30 to line 62. With respect to the limitations of claim 1 line 5, the examiner interprets the modulation, jitter and error rate as providing the additional second factor. With respect to the fields, the examiner interprets the ability as discussed at either col. 4 lines 55-63 as so defining a variety of areas and the interprets such "fields".

Response to Arguments

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Applicant's arguments filed 9/7/04 have been fully considered but they are not persuasive.

Applicants' arguments on page 18-19 of the above noted response focuses upon:

a) lacking both a recording power value and a characteristic value of the recording pulses.

Applicants' attention is drawn to the disclosure of Spruit et al, for instance at col. 1 lines 35-44, and commencing at col. 8 line 34 till col. 9 lines 49. Note the disclosure with respect to timing of the pulse pattern, as well as lines 43-45, which indicates that combinations of recording parameters can be relied upon as well. Hence the argument is not persuasive.

b) different fields as required by claims 17-18 are not found. Applicants' attention is drawn to col. 4 lines 55-63, which discloses the ability of writing these test signals in various locations of the disc including specific test areas, as well as col. 4 lines 15-30 wherein the test mark 11 is written by a series of pulses and at one or more power levels. The examiner interprets such as disclosing the ability of writing the test signals for a plurality of times, and each such writing is interpreted as a field. This conforms to applicants' disclosure of having 5 test signals.

c) Kim,

With respect to Kim, applicants' attention is drawn to tables 1 and 2 and the discussion thereof, wherein the examiner interprets either the speed value or the write strategy as stated in the reference as the second factor.

Response to Arguments

Kim is prior art under 35 USC 102 (e).

Applicant's arguments filed 9/7/04 have been fully considered but they are not persuasive.

Applicants' arguments on page 19 of the above noted response focuses upon:

a) the factor values comprise a recording power value and a characteristic value of recording pulses:

Applicants' attention is drawn to col. 5 line 23-till col. 7 line 25, wherein not only the power value, but also a characteristic value of recording pulses is found. As noted in the above passage, the value of the W pulses varies in accordance not only with the manufacturer but also Nx speed, wherein N as depicted is either 1x or 2x.

With respect to applicants' argument against claims 17 & 18, that the first and second field are not found, the examiner concludes that such is inherently present – see the description of the conventional (prior)/art with respect to figures 1-3, wherein note the 3 different power values , pop, + or – a. This leads the examiner to conclude that the test signal is written at least 3 times at various power levels, which conforms to applicants' description of recording the test signal 5 times. Hence each time is interpreted as a field. The examiner could introduce Osakabe under 103 considerations , as the conventional art if applicants' could convince the examiner that the above conclusion is incorrect in any subsequent action wherein motivation is to permit for normal testing of any system parameter predicated on having the test signal recorded a plurality of times to ensure best reproduction.

With respect to claims 17 & 18, this product is met when the above systems operate upon the record medium.

2. Claims 1-3,17-18 are rejected under 35 U.S.C. 102(e) as being anticipated by O'Neill et al.

Applicants' attention is drawn to the discussion with respect to figure 5c, commencing at col. 11 line 34. Wherein various power levels: (P_M) to (P_g) are depicted as well as a width/or level characteristic is depicted (Tau_M), (Tau_g). The examiner interprets the first field as being that from the beginning of the first pulse noted in the figure, and the second field as that of the second pulse depicted for claims 17 & 18.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osakabe further considered with either Ohba or Toda et al.

With respect to claims 1 and 2, Osakabe discloses in this environment the ability of controlling power levels by using a test signal procedure, wherein variation of at least one factor representing the recording power value is clearly depicted – see the analysis/discussion with respect to the figure 4 for instance.

The test signal is reproduced and appropriate determination is subsequently made in order to optimize the recording condition.

With respect to a characteristic value of recording pulses – either width and or level, the examiner interprets such as an indication as to the modulation method the information signal is to be/or has been recorded onto the medium.

Such an ability is taught by either Ohba – see the discussion with respect to either EFM1 and EFM2 signals or Toda et al – see the discussion at col. lines 50-67.

With respect to claim 3, the subsequent ability of recording the input data by using the appropriately determined optimum recording condition is discussed in Osakabe.

With respect to claim 4, the second test data is interpreted as the erase power and such is appropriately recorded.

4. Claims 4,5, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Osakabe.

With respect to claim 4, the first test data is interpreted as the power level, while the claimed second factor value is interpreted as the erase power.

With respect to claim 5 see the discussion commencing at col. 5 line 40 till col. 6 line 36.

With respect to claim 10, either level or pulse width is selected to be varied.

5. Claims 6,7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 4 and 5 in paragraph 4 above, and further in view of Spruit et al ('339).

Although there is no clear description of "jitter" in the Osakabe reference, as further discussed/talked about in Spruit et al, detection of the "test" pattern and measuring the appropriate leading and trailing edge variation yields the "jitter".

It would have been obvious to modify the base system of Osakabe with the above teaching from Spruit et al, motivation is to correct for any noise/jitter with respect to the detected test signal and hence improve the recording performance.

With respect to claim 7, note that the jitter of various marks are discussed, 3, 4, 5, ...11 T and hence the examiner concludes the selection of the 3T as merely a selection between alternative signal marks present and obvious to one of ordinary skill in the art.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 4,5, and 10 as stated in paragraph 4 above, and further in view of Kirino et al.

The ability of pulse level variation relying upon/using a variation of the focusing distance is not found in the above documents.

Kirino et al teach in this environment, the additional ability of encompassing, using a variation in focus ability in order to perform a better jitter performance – see the discussion commencing at col. 3 line 1 till line 64.

It would have been obvious to modify the base system as discussed above in paragraph 6, motivation is as discussed in Kirino et al.

7. Claims 4,5, and 10 are rejected under 35 U.S.C. 102(b/e) as being anticipated by Osakabe or Spruit et al respectively.

With respect to these claims the references are relied upon for the reasons as stated above.

Additionally, with respect to the limitations of claim 10, it is noted that the erasing level in Osakabe or Spruit et al.

Response to Arguments

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

The reference to OSAWA as stated on page 21 of the above noted response, ***IS NOT RELIED UPON*** in the rejection of these claims. The examiner interprets applicants' argument as focusing upon the Osakabe document.

Applicants' arguments of 9/7/04 at page 22 focuses on the point that neither document provides for a first and second test areas. Note the above rebuttals in paragraph 1 with respect to Osakabe and Spruit.

8. Claims 4,5 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim.

Kim is relied upon for the reasons stated above. Either the write strategy/speed factor or the normalized modulation of the read signal is the second factor.

Response to Arguments

Applicants' arguments of 9/7/04 have been considered but are not persuasive. See the above rebuttal with respect to claims 1-3, 17 & 18 in paragraph 1.

9. Claims 6 and 13 are rejected under 35 USC 102 (b/e) as being anticipated by either EP 557584 or Spruit et al.

The above documents disclose the additional feature/second test data (factor) as jitter.

Allowable Subject Matter

Claims 13-16 and 20-22 are allowed for the reasons stated in the previous OA. The examiner regrets the erroneous stated in the previous OA with respect to claim 13 as being met by either Spruit et al or the EP document, such is not the case.

Claim 12 is objected to for the reasons stated above (with respect to the "second field"). Although no specific rejection is presented, if applicants convince the examiner that such is an incorrect interpretation, the examiner will revisit the claim limitations.

Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 13 is allowed over the art of record. None of the cited prior art teach the additional ability of vary the signal format while recording test data onto the test area in this environment as recited by the claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psitos
Primary Examiner
Art Unit 2653

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